

**AMENDMENTS TO THE CLAIMS**

1-10. (cancelled)

11. (previously presented) A hydrofluorination catalyst based on chromium oxide which contains ammonium salt and which exhibits a content of ammonium salts of less than or equal to 0.2% by weight, expressed in the form of  $\text{NH}_4^+$ , with respect to the content of chromium in the catalyst, expressed in the form of  $\text{Cr}_2\text{O}_3$ .

12. (previously presented) The catalyst according to claim 11, in which the content of ammonium salts is less than or equal to 0.1% by weight of ammonium salts.

13. (previously presented) The catalyst according to claim 11, additionally comprising other metals or salts of other metals and their mixtures as cocatalyst.

14. (Currently amended) ~~The process~~ **A process** for the hydrofluorination of a halogenated hydrocarbon which comprises reacting a halogenated hydrocarbon with hydrogen fluoride in the presence of the catalyst according to claim 11.

15. (previously presented) The process according to claim 14, wherein the halogenated hydrocarbon is an aliphatic alkane corresponding to the general formula  $\text{C}_w\text{H}_x\text{X}_y\text{F}_z$  (I), wherein

w is an integer between 1 and 6,

x is an integer between 0 and  $(2w + 1)$ ,

y is an integer between 1 and  $(2w + 1)$ ,

z is an integer between 0 and  $(2w + 1)$ ,

the sum  $(x + y + z)$  has the value  $(2w + 2)$  and

X represents chlorine or bromine.

16. (previously presented) The process according to claim 14, wherein the halogenated hydrocarbon is an aliphatic alkene corresponding to the general formula  $C_wH_xX_yF_z$  (I), wherein
- w is an integer between 1 and 6,
- x is an integer between 0 and  $(2w - 1)$ ,
- y is an integer between 1 and  $(2w - 1)$ ,
- z is an integer between 0 and  $(2w - 1)$ ,
- the sum  $(x + y + z)$  has the value  $2w$  and
- X represents chlorine or bromine.
17. (previously presented) The process according to claim 14, wherein the reaction of the halogenated hydrocarbon with the hydrogen fluoride takes place in a gas phase.
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19. (previously presented) The process according to claim 14, wherein difluoromethane is produced by reacting hydrogen fluoride and dichloromethane.
20. (previously presented) The process according to claim 14, wherein 1,1,1,2-tetrafluoroethane is produced by reacting hydrogen fluoride and a compound chosen from trichloroethylene or 2-chloro-1,1,1-trifluoroethane.

21. (previously presented) The process according to claim 14, wherein pentafluoroethane is produced by reacting hydrogen fluoride and a compound selected from the group consisting of perchloroethylene, fluorotetrachlorethane, difluorotrichloroethane, trifluorodichloroethane and chlorotetrafluoroethane.
22. (previously presented) The catalyst as claimed in claim 11, which consists essentially of bulk chromium oxide which contains ammonium salt and which exhibits a content of ammonium salts of less than or equal to 0.2% by weight, expressed in the form of  $\text{NH}_4^+$ , with respect to the content of chromium in the catalyst, expressed in the form of  $\text{Cr}_2\text{O}_3$ .
23. (previously presented) The catalyst according to claim 22, in which the content of ammonium salts is less than or equal to 0.1% by weight of ammonium salts.
24. (previously presented) A process for the hydrofluorination of a halogenated hydrocarbon which comprises reacting a halogenated hydrocarbon with hydrogen fluoride in the presence of the catalyst according to claim 22.
25. (previously presented) The process according to claim 24, wherein the halogenated hydrocarbon is an aliphatic alkane corresponding to the general formula  $\text{C}_w\text{H}_x\text{X}_y\text{F}_z$  (I), wherein
- w is an integer between 1 and 6,
- x is an integer between 0 and  $(2w + 1)$ ,
- y is an integer between 1 and  $(2w + 1)$ ,
- z is an integer between 0 and  $(2w + 1)$ ,

the sum  $(x + y + z)$  has the value  $(2w + 2)$  and

X represents chlorine or bromine.

27. (previously presented) The process according to claim 24, wherein the halogenated hydrocarbon is an aliphatic alkene corresponding to the general formula  $C_wH_xX_yF_z$  (I), wherein
- w is an integer between 1 and 6,
- x is an integer between 0 and  $(2w - 1)$ ,
- y is an integer between 1 and  $(2w - 1)$ ,
- z is an integer between 0 and  $(2w - 1)$ ,
- the sum  $(x + y + z)$  has the value  $2w$  and
- X represents chlorine or bromine.
28. (previously presented) The process according to claim 24, wherein the reaction of the halogenated hydrocarbon with the hydrogen fluoride takes place in a gas phase.
29. (previously presented) The process according to claim 24, wherein difluoromethane is produced by reacting hydrogen fluoride and dichloromethane.
30. (previously presented) The process according to claim 24, wherein 1,1,1,2-tetrafluoroethane is produced by reacting hydrogen fluoride and a compound chosen from trichloroethylene or 2-chloro-1,1,1-trifluoroethane.
31. (previously presented) The catalyst according to claim 11, wherein content of ammonium salts is less than or equal to 0.05% by weight.

Application No.: 09/807285

Docket No.: 05129-00047-US

32. (previously presented) The catalyst according to claim 22, wherein content of ammonium salts is less than or equal to 0.05% by weight.

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